

Claims

1. A distribution request management method, characterized in that:
a maximum number of distributable requests is set arbitrarily for requests from one communication network to one or plural contents providing servers provided on another communication network, said requests being made for distribution of signals including data of contents; and
a request management means for managing said requests sends said signal distribution requests to said contents providing servers as long as the number of said requests is within a range not larger than said maximum number.
2. A distribution request management method according to Claim 1, characterized in that a reserved number is set arbitrarily within a range not larger than said maximum number, and a space for requests for distribution of signals including data of each of one or plural specific contents is held to correspond to said reserved number.
3. A distribution request management method according to Claim 2, characterized in that an upper limit reserved number not smaller than said reserved number is set arbitrarily within a range not larger than said maximum number for each of said specific contents, and requests for distribution of signals including data of said specific contents, the number of which requests is larger

than said reserved number and not larger than said upper limit reserved number, are sent to said contents providing servers as long as the number of said signal distribution requests is within a range of a number obtained by subtracting said reserved numbers assigned for said specific contents from said maximum number.

4. A distribution request management method according to Claim 3, characterized in that for contents for which said upper limit reserved number is set at 0, said signal distribution requests are not sent to said contents providing servers.

5. A distribution request management method according to Claim 2, characterized in that:

when said request management means concludes that reservation start conditions are satisfied for requests for distribution of signals including data of one of said specific contents,

said request management means assigns a free space to said requests so as to hold a space corresponding to said set reserved number till said assigned space reaches said reserved number as long as said assigned space is within a range of a number obtained by subtracting said reserved numbers assigned for said specific contents from said maximum number.

6. A distribution request management method according to Claim 2, characterized in that:

when said request management means concludes that reservation termination conditions are satisfied for requests for distribution of signals including data of one of said specific contents,

said request management means releases said held space corresponding to said reserved number.

7. A distribution request management method, characterized in that:

when a request management means for managing requests which are made from one communication network to a contents providing server provided on another communication network and for distribution of signals including data of contents in a streaming format concludes that a signal including data of a specific one of said contents requested by said signal distribution requests is a signal out of a arbitrarily defined bandwidth range, said request management means prevents distribution of said signal including data of said specific one of said contents.

8. A distribution request management method according to any one of Claims 1 to 7, characterized in that said one communication network is a mobile

communication network performing wireless communication with mobile terminal devices.

9. A distribution request management apparatus provided on a communication network between one communication network and another communication network, characterized by carrying out a process in which requests for distribution of signals including data of contents are sent from said one communication network to a contents providing server provided on said another communication network as long as the number of said signal distribution requests is within a range not larger than a maximum number of distributable requests set arbitrarily.

10. A distribution request management apparatus according to Claim 9, characterized by carrying out a process in which a space for requests for distribution of signals including data of each of one or plural specific contents is held to correspond to a reserved number set arbitrarily within a range not larger than said maximum number.

11. A distribution request management apparatus according to Claim 9, characterized by carrying out a process in which when it is concluded the number of requests for distribution of signals including data of each of said

specific contents is larger than said reserved number and not larger than an upper limit reserved number set arbitrarily within a range not smaller than said reserved number, said signal distribution requests are sent to said contents providing server as long as the number of said requests is within a range of a number obtained by subtracting said reserved numbers assigned for said specific contents from said maximum number.

12. A distribution request management apparatus according to Claim 11, characterized by carrying out a process in which when it is concluded that said upper limit reserved number for a specific one of said contents is set at 0, said signal distribution requests including data of said specific one of said contents are not sent.

13. A distribution request management apparatus according to Claim 10, characterized by carrying out a process in which when it is concluded that reservation start conditions are satisfied for requests for distribution of signals including data of one of said specific contents, a free space is assigned to said requests so as to secure a space corresponding to said set reserved number till said assigned space reaches said reserved number as long as said assigned space is within a range of a number obtained by subtracting said reserved numbers assigned for said specific contents from said maximum number.

14. A distribution request management apparatus according to Claim 10, characterized by carrying out a process in which when it is concluded that reservation termination conditions are satisfied for requests for distribution of signals including data of one of said specific contents, said held space corresponding to said reserved number is released.

15. A distribution request management apparatus provided on a communication network between one communication network and another communication network, characterized by carrying out a process in which:
when it is concluded that a signal including data of contents in a streaming format and requested by a distribution request from a processing apparatus on said one communication network is a signal out of a arbitrarily defined bandwidth range, said signal including data of said contents is not distributed from a contents distribution apparatus on said another communication network to said one communication network.

16. A distribution request management apparatus according to any one of Claims 9 to 15, characterized in that said one communication network is a mobile communication network performing wireless communication with mobile terminal devices.

17. A program of a distribution request management method, characterized by making a computer execute the processes of:

determining whether the number of signals transmitted from one communication network and including instructions of requests to distribute signals including data of contents is a number within a range not larger than a maximum number of distributable signals set arbitrarily, or not; and

sending said signals including said request instructions to a contents providing server provided on another communication network when it is concluded that said number of said signals is a number within a range not larger than said maximum number of distributable signals.

18. A program of a distribution request management method according to Claim 17, characterized by further making said computer execute the processes of:

determining whether said distribution request instructions included in said transmitted signals are instructions of requests to distribute signals including data of a specific one of said contents or not;

determining whether the number of said signals is a number within a range not larger than a reserved number set arbitrarily for said specific one of said contents when it is concluded that said distribution request instructions

included in said transmitted signals are instructions of requests to distribute signals including data of said specific one of said contents; and

transmitting said signals including said request instructions to said contents providing server provided on said another communication network when it is concluded that the number of said signals is a number within a range not larger than said reserved number.

19. A program of a distribution request management method according to Claim 18, characterized by further making said computer execute the processes of:

determining whether the number of said signals is a number within a range not larger than an upper limit reserved number set to be not smaller than said reserved number, or not, when it is concluded that the number of said signals is not a number within a range not larger than said reserved number;

determining whether the number of said signals is a number within a range not larger than a remaining number obtained by subtracting reserved numbers assigned to specific ones of said contents from said maximum number of distributable signals, or not, when it is concluded that the number of said signals is a number within a range not larger than said upper limit reserved number; and

transmitting said signals including said request instructions to said

contents providing server provided on said another communication network when it is concluded that the number of said signals is a number within a range not larger than said remaining number.

20. A program of a distribution request management method according to Claim 19, characterized by further making said computer execute the process of:

preventing said signals including said request instructions from being transmitted to said contents providing server provided on said another communication network when it is concluded that said upper limit reserved number is set at 0 for said signals including said instructions of requests to distribute signals including data of said specific one of said contents.

21. A program of a distribution request management method according to Claim 18, characterized in that:

if it is concluded that reservation start conditions are satisfied for requests for distribution of signals including data of a specific one of said contents,

said computer is made to execute said process of transmitting said signals including said request instructions to said contents providing server till the number of said signals reaches said set reserved number only when it is concluded that said instructions are instructions of requests for distribution of

signals including data of said specific one of said contents.

22. A program of a distribution request management method according to Claim 18, characterized in that:

if it is concluded that reservation termination conditions are satisfied for requests for distribution of signals including data of a specific one of said contents,

said computer is prevented from carrying out said process of determining whether said instructions are instructions of requests for distribution of signals including data of said specific one of said contents.

23. A program of a distribution request management method, characterized in that:

when it is concluded that a signal including data of a specific one of contents in a streaming format and requested by a distribution request from one communication network to a contents providing server provided on another communication network is a signal out of a arbitrarily defined bandwidth range, a computer is made to carry out the process of preventing signal distribution including data of said specific one of contents.

24. A program of a distribution request management method according to

any one of Claims 17 to 23, characterized in that said one communication network is a mobile communication network performing wireless communication with mobile terminal devices.